

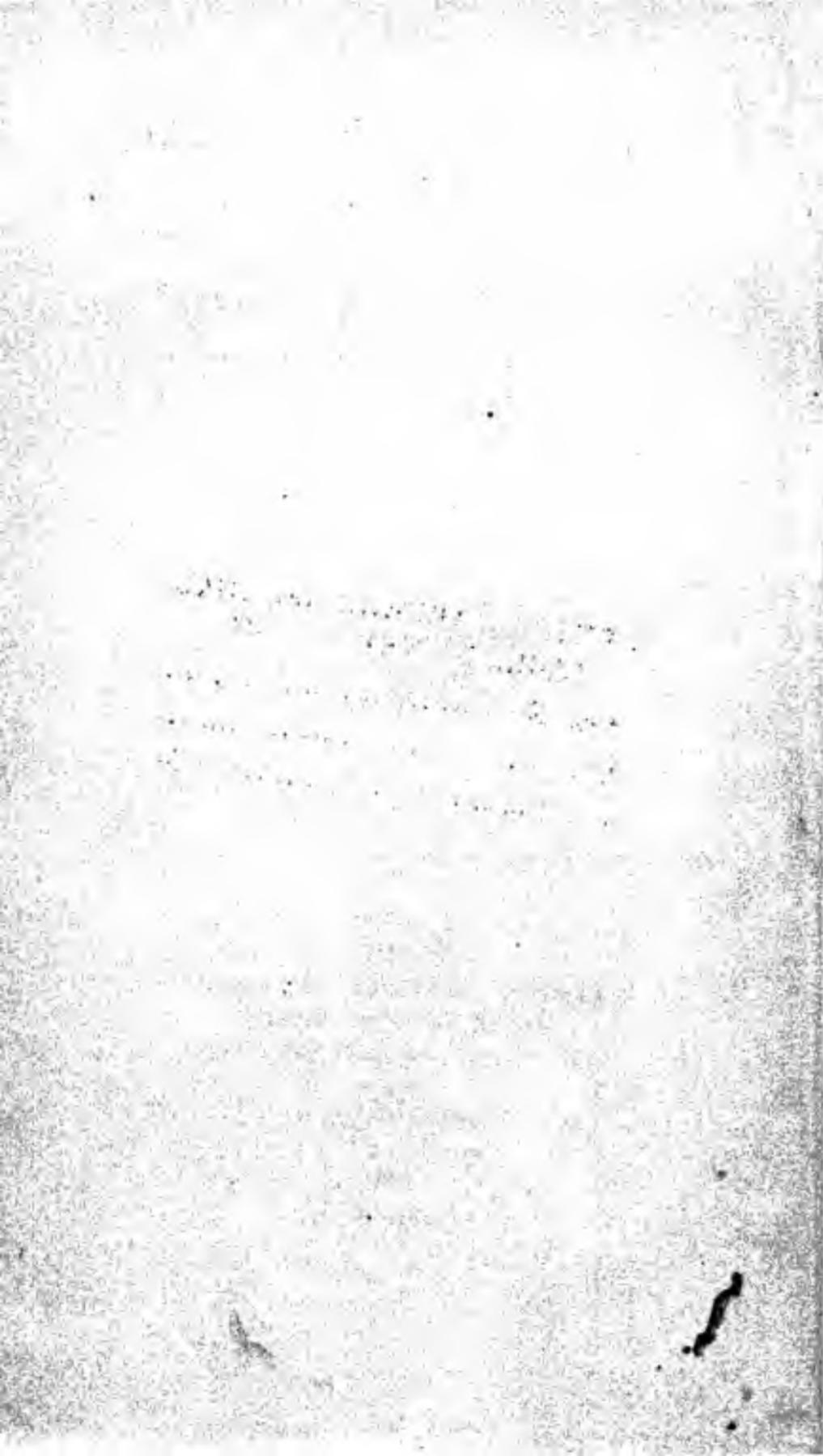
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# GRAINS AND GRAMMES:

7. 3. 2 (3983L)

A TABLE OF EQUIVALENTS FOR  
THE USE OF NUMISMATISTS

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OXFORD UNIVERSITY PRESS, Amen Corner, E.C. 4

1920

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## PREFACE

THIS Table of Equivalents is intended to facilitate the use, by metrologists, of the older volumes of the British Museum Catalogues of Coins especially, and generally of English works on numismatics, in which the weights of coins are given in Troy grains to one place of decimals. As all metrological investigation is now conducted according to the metric system, it is necessary to convert these data into their metric equivalents. The Table proceeds continuously by tenths of a grain from 0.1 grain to 351 grains. It then rises by one grain to 400 grains; then by tens to 500 grains. The basis of calculation is 1 grain = .06479895 gramme, which is derived from the equation 1,000 grammes = 15432.34874 grains.<sup>1</sup> The results have been checked on a Brunsviga calculating machine.

For all ordinary numismatic purposes it is sufficient to carry the metric equivalents to two places of decimals, weighting the figure in the second place where necessary. But in order that the Table may be used to calculate higher numbers not included in it, the equivalents from 0.1 to 0.9 grains, as well as of all integral numbers of grains, are given to four places of decimals.

For the convenience of students, a Table for converting English inches into millimetres and the measures of Mionnet's scale has been appended.

G. F. HILL,  
Keeper of Coins.

BRITISH MUSEUM,  
April 1920.

<sup>1</sup> See W. H. Miller, quoted by J. D. Everett, *Units and Physical Constants* (1886), p. 2.

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GRAINS AND GRAMMES

A TABLE OF EQUIVALENTS FOR THE USE OF  
NUMISMATISTS

0·1—8

0·01—0·58

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
0·1	0·0065	·1	0·20	·1	0·40
·2	0·0130	·2	0·21	·2	0·40
·3	0·0194	·3	0·21	·3	0·41
·4	0·0259	·4	0·22	·4	0·41
·5	0·0324	·5	0·23	·5	0·42
·6	0·0389	·6	0·23	·6	0·43
·7	0·0454	·7	0·24	·7	0·43
·8	0·0518	·8	0·25	·8	0·44
·9	0·0583	·9	0·25	·9	0·45
1·0	0·0648	4·0	0·2592	7·0	0·4536
·1	0·07	·1	0·27	·1	0·46
·2	0·08	·2	0·27	·2	0·47
·3	0·08	·3	0·28	·3	0·47
·4	0·09	·4	0·29	·4	0·48
·5	0·10	·5	0·29	·5	0·49
·6	0·10	·6	0·30	·6	0·49
·7	0·11	·7	0·30	·7	0·50
·8	0·12	·8	0·31	·8	0·51
·9	0·12	·9	0·32	·9	0·51
2·0	0·1296	5·0	0·3240	8·0	0·5184
·1	0·14	·1	0·33	·1	0·52
·2	0·14	·2	0·34	·2	0·53
·3	0·15	·3	0·34	·3	0·54
·4	0·16	·4	0·35	·4	0·54
·5	0·16	·5	0·36	·5	0·55
·6	0·17	·6	0·36	·6	0·56
·7	0·17	·7	0·37	·7	0·56
·8	0·18	·8	0·38	·8	0·57
·9	0·19	·9	0·38	·9	0·58

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
9.0	0.5832	13.0	0.8424	17.0	1.1016
.1	0.59	.1	0.85	.1	1.11
.2	0.60	.2	0.86	.2	1.11
.3	0.60	.3	0.86	.3	1.12
.4	0.61	.4	0.87	.4	1.13
.5	0.62	.5	0.87	.5	1.13
.6	0.62	.6	0.88	.6	1.14
.7	0.63	.7	0.89	.7	1.15
.8	0.64	.8	0.89	.8	1.15
.9	0.64	.9	0.90	.9	1.16
10.0	0.6480	14.0	0.9072	18.0	1.1664
.1	0.65	.1	0.91	.1	1.17
.2	0.66	.2	0.92	.2	1.18
.3	0.67	.3	0.93	.3	1.19
.4	0.67	.4	0.93	.4	1.19
.5	0.68	.5	0.94	.5	1.20
.6	0.69	.6	0.95	.6	1.21
.7	0.69	.7	0.95	.7	1.21
.8	0.70	.8	0.96	.8	1.22
.9	0.71	.9	0.97	.9	1.22
11.0	0.7128	15.0	0.9720	19.0	1.2312
.1	0.72	.1	0.98	.1	1.24
.2	0.73	.2	0.98	.2	1.24
.3	0.73	.3	0.99	.3	1.25
.4	0.74	.4	1.00	.4	1.26
.5	0.75	.5	1.00	.5	1.26
.6	0.75	.6	1.01	.6	1.27
.7	0.76	.7	1.02	.7	1.28
.8	0.76	.8	1.02	.8	1.28
.9	0.77	.9	1.03	.9	1.29
12.0	0.7776	16.0	1.0368	20.0	1.2960
.1	0.78	.1	1.04	.1	1.30
.2	0.79	.2	1.05	.2	1.31
.3	0.80	.3	1.06	.3	1.32
.4	0.80	.4	1.06	.4	1.32
.5	0.81	.5	1.07	.5	1.33
.6	0.82	.6	1.08	.6	1.33
.7	0.82	.7	1.08	.7	1.34
.8	0.83	.8	1.09	.8	1.35
.9	0.84	.9	1.10	.9	1.35

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
21.0	1.3608	25.0	1.6200	29.0	1.8792
.1	1.37	.1	1.63	.1	1.89
.2	1.37	.2	1.63	.2	1.89
.3	1.38	.3	1.64	.3	1.90
.4	1.39	.4	1.65	.4	1.91
.5	1.39	.5	1.65	.5	1.91
.6	1.40	.6	1.66	.6	1.92
.7	1.41	.7	1.67	.7	1.92
.8	1.41	.8	1.67	.8	1.93
.9	1.42	.9	1.68	.9	1.94
22.0	1.4256	26.0	1.6848	30.0	1.9440
.1	1.43	.1	1.69	.1	1.95
.2	1.44	.2	1.70	.2	1.96
.3	1.45	.3	1.70	.3	1.96
.4	1.45	.4	1.71	.4	1.97
.5	1.46	.5	1.72	.5	1.98
.6	1.46	.6	1.72	.6	1.98
.7	1.47	.7	1.73	.7	1.99
.8	1.48	.8	1.74	.8	2.00
.9	1.48	.9	1.74	.9	2.00
23.0	1.4904	27.0	1.7496	31.0	2.0088
.1	1.50	.1	1.76	.1	2.02
.2	1.50	.2	1.76	.2	2.02
.3	1.51	.3	1.77	.3	2.03
.4	1.52	.4	1.78	.4	2.03
.5	1.52	.5	1.78	.5	2.04
.6	1.53	.6	1.79	.6	2.05
.7	1.54	.7	1.79	.7	2.05
.8	1.54	.8	1.80	.8	2.06
.9	1.55	.9	1.81	.9	2.07
24.0	1.5552	28.0	1.8144	32.0	2.0736
.1	1.56	.1	1.82	.1	2.08
.2	1.57	.2	1.83	.2	2.09
.3	1.57	.3	1.83	.3	2.09
.4	1.58	.4	1.84	.4	2.10
.5	1.59	.5	1.85	.5	2.11
.6	1.59	.6	1.85	.6	2.11
.7	1.60	.7	1.86	.7	2.12
.8	1.61	.8	1.87	.8	2.13
.9	1.61	.9	1.87	.9	2.13

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
33.0	2.1384	37.0	2.3976	41.0	2.6568
.1	2.15	.1	2.40	.1	2.66
.2	2.15	.2	2.41	.2	2.67
.3	2.16	.3	2.42	.3	2.68
.4	2.16	.4	2.42	.4	2.68
.5	2.17	.5	2.43	.5	2.69
.6	2.18	.6	2.44	.6	2.70
.7	2.18	.7	2.44	.7	2.70
.8	2.19	.8	2.45	.8	2.71
.9	2.20	.9	2.46	.9	2.72
34.0	2.2032	38.0	2.4624	42.0	2.7216
.1	2.21	.1	2.47	.1	2.73
.2	2.22	.2	2.48	.2	2.73
.3	2.22	.3	2.48	.3	2.74
.4	2.23	.4	2.49	.4	2.75
.5	2.24	.5	2.49	.5	2.75
.6	2.24	.6	2.50	.6	2.76
.7	2.25	.7	2.51	.7	2.77
.8	2.26	.8	2.51	.8	2.77
.9	2.26	.9	2.52	.9	2.78
35.0	2.2680	39.0	2.5272	43.0	2.7864
.1	2.27	.1	2.53	.1	2.79
.2	2.28	.2	2.54	.2	2.80
.3	2.29	.3	2.55	.3	2.81
.4	2.29	.4	2.55	.4	2.81
.5	2.30	.5	2.56	.5	2.82
.6	2.31	.6	2.57	.6	2.83
.7	2.31	.7	2.57	.7	2.83
.8	2.32	.8	2.58	.8	2.84
.9	2.33	.9	2.59	.9	2.84
36.0	2.3328	40.0	2.5920	44.0	2.8512
.1	2.34	.1	2.60	.1	2.86
.2	2.35	.2	2.60	.2	2.86
.3	2.35	.3	2.61	.3	2.87
.4	2.36	.4	2.62	.4	2.88
.5	2.37	.5	2.62	.5	2.88
.6	2.37	.6	2.63	.6	2.89
.7	2.38	.7	2.64	.7	2.90
.8	2.38	.8	2.64	.8	2.90
.9	2.39	.9	2.65	.9	2.91

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
45·0	2·9160	49·0	3·1751	53·0	3·4343
·1	2·92	·1	3·18	·1	3·44
·2	2·93	·2	3·19	·2	3·45
·3	2·94	·3	3·19	·3	3·45
·4	2·94	·4	3·20	·4	3·46
·5	2·95	·5	3·21	·5	3·47
·6	2·95	·6	3·21	·6	3·47
·7	2·96	·7	3·22	·7	3·48
·8	2·97	·8	3·23	·8	3·49
·9	2·97	·9	3·23	·9	3·49
46·0	2·9808	50·0	3·2399	54·0	3·4991
·1	2·99	·1	3·25	·1	3·51
·2	2·99	·2	3·25	·2	3·51
·3	3·00	·3	3·26	·3	3·52
·4	3·01	·4	3·27	·4	3·53
·5	3·01	·5	3·27	·5	3·53
·6	3·02	·6	3·28	·6	3·54
·7	3·03	·7	3·29	·7	3·54
·8	3·03	·8	3·29	·8	3·55
·9	3·04	·9	3·30	·9	3·56
47·0	3·0456	51·0	3·3047	55·0	3·5639
·1	3·05	·1	3·31	·1	3·57
·2	3·06	·2	3·32	·2	3·58
·3	3·06	·3	3·32	·3	3·58
·4	3·07	·4	3·33	·4	3·59
·5	3·08	·5	3·34	·5	3·60
·6	3·08	·6	3·34	·6	3·60
·7	3·09	·7	3·35	·7	3·61
·8	3·10	·8	3·36	·8	3·62
·9	3·10	·9	3·36	·9	3·62
48·0	3·1103	52·0	3·3695	56·0	3·6287
·1	3·12	·1	3·38	·1	3·64
·2	3·12	·2	3·38	·2	3·64
·3	3·13	·3	3·39	·3	3·65
·4	3·14	·4	3·40	·4	3·65
·5	3·14	·5	3·40	·5	3·66
·6	3·15	·6	3·41	·6	3·67
·7	3·16	·7	3·41	·7	3·67
·8	3·16	·8	3·42	·8	3·68
·9	3·17	·9	3·43	·9	3·69

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
57.0	3.6935	61.0	3.9527	65.0	4.2119
.1	3.70	.1	3.96	.1	4.22
.2	3.71	.2	3.97	.2	4.22
.3	3.71	.3	3.97	.3	4.23
.4	3.72	.4	3.98	.4	4.24
.5	3.73	.5	3.99	.5	4.24
.6	3.73	.6	3.99	.6	4.25
.7	3.74	.7	4.00	.7	4.26
.8	3.75	.8	4.00	.8	4.26
.9	3.75	.9	4.01	.9	4.27
58.0	3.7583	62.0	4.0175	66.0	4.2767
.1	3.76	.1	4.02	.1	4.28
.2	3.77	.2	4.03	.2	4.29
.3	3.78	.3	4.04	.3	4.30
.4	3.78	.4	4.04	.4	4.30
.5	3.79	.5	4.05	.5	4.31
.6	3.80	.6	4.06	.6	4.32
.7	3.80	.7	4.06	.7	4.32
.8	3.81	.8	4.07	.8	4.33
.9	3.82	.9	4.08	.9	4.34
59.0	3.8231	63.0	4.0823	67.0	4.3415
.1	3.83	.1	4.09	.1	4.35
.2	3.84	.2	4.10	.2	4.35
.3	3.84	.3	4.10	.3	4.36
.4	3.85	.4	4.11	.4	4.37
.5	3.86	.5	4.11	.5	4.37
.6	3.86	.6	4.12	.6	4.38
.7	3.87	.7	4.13	.7	4.39
.8	3.87	.8	4.13	.8	4.39
.9	3.88	.9	4.14	.9	4.40
60.0	3.8879	64.0	4.1471	68.0	4.4063
.1	3.89	.1	4.15	.1	4.41
.2	3.90	.2	4.16	.2	4.42
.3	3.91	.3	4.17	.3	4.43
.4	3.91	.4	4.17	.4	4.43
.5	3.92	.5	4.18	.5	4.44
.6	3.93	.6	4.19	.6	4.45
.7	3.93	.7	4.19	.7	4.45
.8	3.94	.8	4.20	.8	4.46
.9	3.95	.9	4.21	.9	4.46

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
69.0	4.4711	73.0	4.7303	77.0	4.9895
.1	4.48	.1	4.74	.1	5.00
.2	4.48	.2	4.74	.2	5.00
.3	4.49	.3	4.75	.3	5.01
.4	4.50	.4	4.76	.4	5.02
.5	4.50	.5	4.76	.5	5.02
.6	4.51	.6	4.77	.6	5.03
.7	4.52	.7	4.78	.7	5.04
.8	4.52	.8	4.78	.8	5.04
.9	4.53	.9	4.79	.9	5.05
70.0	4.5359	74.0	4.7951	78.0	5.0543
.1	4.54	.1	4.80	.1	5.06
.2	4.55	.2	4.81	.2	5.07
.3	4.56	.3	4.81	.3	5.07
.4	4.56	.4	4.82	.4	5.08
.5	4.57	.5	4.83	.5	5.09
.6	4.57	.6	4.83	.6	5.09
.7	4.58	.7	4.84	.7	5.10
.8	4.59	.8	4.85	.8	5.11
.9	4.59	.9	4.85	.9	5.11
71.0	4.6007	75.0	4.8599	79.0	5.1191
.1	4.61	.1	4.87	.1	5.13
.2	4.61	.2	4.87	.2	5.13
.3	4.62	.3	4.88	.3	5.14
.4	4.63	.4	4.89	.4	5.15
.5	4.63	.5	4.89	.5	5.15
.6	4.64	.6	4.90	.6	5.16
.7	4.65	.7	4.91	.7	5.16
.8	4.65	.8	4.91	.8	5.17
.9	4.66	.9	4.92	.9	5.18
72.0	4.6655	76.0	4.9247	80.0	5.1839
.1	4.67	.1	4.93	.1	5.19
.2	4.68	.2	4.94	.2	5.20
.3	4.69	.3	4.94	.3	5.20
.4	4.69	.4	4.95	.4	5.21
.5	4.70	.5	4.96	.5	5.22
.6	4.70	.6	4.96	.6	5.22
.7	4.71	.7	4.97	.7	5.23
.8	4.72	.8	4.98	.8	5.24
.9	4.72	.9	4.98	.9	5.24

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
81.0	5.2487	85.0	5.5079	89.0	5.7671
.1	5.26	.1	5.51	.1	5.77
.2	5.26	.2	5.52	.2	5.78
.3	5.27	.3	5.53	.3	5.79
.4	5.27	.4	5.53	.4	5.79
.5	5.28	.5	5.54	.5	5.80
.6	5.29	.6	5.55	.6	5.81
.7	5.29	.7	5.55	.7	5.81
.8	5.30	.8	5.56	.8	5.82
.9	5.31	.9	5.57	.9	5.83
82.0	5.3135	86.0	5.5727	90.0	5.8319
.1	5.32	.1	5.58	.1	5.84
.2	5.33	.2	5.59	.2	5.84
.3	5.33	.3	5.59	.3	5.85
.4	5.34	.4	5.60	.4	5.86
.5	5.35	.5	5.61	.5	5.86
.6	5.35	.6	5.61	.6	5.87
.7	5.36	.7	5.62	.7	5.88
.8	5.37	.8	5.62	.8	5.88
.9	5.37	.9	5.63	.9	5.89
83.0	5.3783	87.0	5.6375	91.0	5.8967
.1	5.38	.1	5.64	.1	5.90
.2	5.39	.2	5.65	.2	5.91
.3	5.40	.3	5.66	.3	5.92
.4	5.40	.4	5.66	.4	5.92
.5	5.41	.5	5.67	.5	5.93
.6	5.42	.6	5.68	.6	5.94
.7	5.42	.7	5.68	.7	5.94
.8	5.43	.8	5.69	.8	5.95
.9	5.44	.9	5.70	.9	5.96
84.0	5.4431	88.0	5.7023	92.0	5.9615
.1	5.45	.1	5.71	.1	5.97
.2	5.46	.2	5.72	.2	5.97
.3	5.46	.3	5.72	.3	5.98
.4	5.47	.4	5.73	.4	5.99
.5	5.48	.5	5.73	.5	5.99
.6	5.48	.6	5.74	.6	6.00
.7	5.49	.7	5.75	.7	6.01
.8	5.49	.8	5.75	.8	6.01
.9	5.50	.9	5.76	.9	6.02

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
93.0	6.0263	97.0	6.2855	101.0	6.5447
.1	6.03	.1	6.29	.1	6.55
.2	6.04	.2	6.30	.2	6.56
.3	6.05	.3	6.31	.3	6.56
.4	6.05	.4	6.31	.4	6.57
.5	6.06	.5	6.32	.5	6.58
.6	6.07	.6	6.32	.6	6.58
.7	6.07	.7	6.33	.7	6.59
.8	6.08	.8	6.34	.8	6.60
.9	6.08	.9	6.34	.9	6.60
94.0	6.0911	98.0	6.3503	102.0	6.6095
.1	6.10	.1	6.36	.1	6.62
.2	6.10	.2	6.36	.2	6.62
.3	6.11	.3	6.37	.3	6.63
.4	6.12	.4	6.38	.4	6.64
.5	6.12	.5	6.38	.5	6.64
.6	6.13	.6	6.39	.6	6.65
.7	6.14	.7	6.40	.7	6.65
.8	6.14	.8	6.40	.8	6.66
.9	6.15	.9	6.41	.9	6.67
95.0	6.1559	99.0	6.4151	103.0	6.6743
.1	6.16	.1	6.42	.1	6.68
.2	6.17	.2	6.43	.2	6.69
.3	6.18	.3	6.43	.3	6.69
.4	6.18	.4	6.44	.4	6.70
.5	6.19	.5	6.45	.5	6.71
.6	6.19	.6	6.45	.6	6.71
.7	6.20	.7	6.46	.7	6.72
.8	6.21	.8	6.47	.8	6.73
.9	6.21	.9	6.47	.9	6.73
96.0	6.2207	100.0	6.4799	104.0	6.7391
.1	6.23	.1	6.49	.1	6.75
.2	6.23	.2	6.49	.2	6.75
.3	6.24	.3	6.50	.3	6.76
.4	6.25	.4	6.51	.4	6.77
.5	6.25	.5	6.51	.5	6.77
.6	6.26	.6	6.52	.6	6.78
.7	6.27	.7	6.53	.7	6.78
.8	6.27	.8	6.53	.8	6.79
.9	6.28	.9	6.54	.9	6.80

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
105.0	6.8039	109.0	7.0631	113.0	7.3223
.1	6.81	.1	7.07	.1	7.33
.2	6.82	.2	7.08	.2	7.34
.3	6.82	.3	7.08	.3	7.34
.4	6.83	.4	7.09	.4	7.35
.5	6.84	.5	7.10	.5	7.35
.6	6.84	.6	7.10	.6	7.36
.7	6.85	.7	7.11	.7	7.37
.8	6.86	.8	7.11	.8	7.37
.9	6.86	.9	7.12	.9	7.38
106.0	6.8687	110.0	7.1279	114.0	7.3871
.1	6.88	.1	7.13	.1	7.39
.2	6.88	.2	7.14	.2	7.40
.3	6.89	.3	7.15	.3	7.41
.4	6.89	.4	7.15	.4	7.41
.5	6.90	.5	7.16	.5	7.42
.6	6.91	.6	7.17	.6	7.43
.7	6.91	.7	7.17	.7	7.43
.8	6.92	.8	7.18	.8	7.44
.9	6.93	.9	7.19	.9	7.45
107.0	6.9335	111.0	7.1927	115.0	7.4519
.1	6.94	.1	7.20	.1	7.46
.2	6.95	.2	7.21	.2	7.46
.3	6.95	.3	7.21	.3	7.47
.4	6.96	.4	7.22	.4	7.48
.5	6.97	.5	7.22	.5	7.48
.6	6.97	.6	7.23	.6	7.49
.7	6.98	.7	7.24	.7	7.50
.8	6.99	.8	7.24	.8	7.50
.9	6.99	.9	7.25	.9	7.51
108.0	6.9983	112.0	7.2575	116.0	7.5167
.1	7.00	.1	7.26	.1	7.52
.2	7.01	.2	7.27	.2	7.53
.3	7.02	.3	7.28	.3	7.54
.4	7.02	.4	7.28	.4	7.54
.5	7.03	.5	7.29	.5	7.55
.6	7.04	.6	7.30	.6	7.56
.7	7.04	.7	7.30	.7	7.56
.8	7.05	.8	7.31	.8	7.57
.9	7.06	.9	7.32	.9	7.57

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
117.0	7.5815	121.0	7.8407	125.0	8.0999
.1	7.59	.1	7.85	.1	8.11
.2	7.59	.2	7.85	.2	8.11
.3	7.60	.3	7.86	.3	8.12
.4	7.61	.4	7.87	.4	8.13
.5	7.61	.5	7.87	.5	8.13
.6	7.62	.6	7.88	.6	8.14
.7	7.63	.7	7.89	.7	8.15
.8	7.63	.8	7.89	.8	8.15
.9	7.64	.9	7.90	.9	8.16
118.0	7.6463	122.0	7.9055	126.0	8.1647
.1	7.65	.1	7.91	.1	8.17
.2	7.66	.2	7.92	.2	8.18
.3	7.67	.3	7.92	.3	8.18
.4	7.67	.4	7.93	.4	8.19
.5	7.68	.5	7.94	.5	8.20
.6	7.69	.6	7.94	.6	8.20
.7	7.69	.7	7.95	.7	8.21
.8	7.70	.8	7.96	.8	8.22
.9	7.70	.9	7.96	.9	8.22
119.0	7.7111	123.0	7.9703	127.0	8.2295
.1	7.72	.1	7.98	.1	8.24
.2	7.72	.2	7.98	.2	8.24
.3	7.73	.3	7.99	.3	8.25
.4	7.74	.4	8.00	.4	8.26
.5	7.74	.5	8.00	.5	8.26
.6	7.75	.6	8.01	.6	8.27
.7	7.76	.7	8.02	.7	8.27
.8	7.76	.8	8.02	.8	8.28
.9	7.77	.9	8.03	.9	8.29
120.0	7.7759	124.0	8.0351	128.0	8.2943
.1	7.78	.1	8.04	.1	8.30
.2	7.79	.2	8.05	.2	8.31
.3	7.80	.3	8.05	.3	8.31
.4	7.80	.4	8.06	.4	8.32
.5	7.81	.5	8.07	.5	8.33
.6	7.81	.6	8.07	.6	8.33
.7	7.82	.7	8.08	.7	8.34
.8	7.83	.8	8.09	.8	8.35
.9	7.83	.9	8.09	.9	8.35

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
129.0	8.3591	133.0	8.6183	137.0	8.8775
.1	8.37	.1	8.62	.1	8.88
.2	8.37	.2	8.63	.2	8.89
.3	8.38	.3	8.64	.3	8.90
.4	8.38	.4	8.64	.4	8.90
.5	8.39	.5	8.65	.5	8.91
.6	8.40	.6	8.66	.6	8.92
.7	8.40	.7	8.66	.7	8.92
.8	8.41	.8	8.67	.8	8.93
.9	8.42	.9	8.68	.9	8.94
130.0	8.4239	134.0	8.6831	138.0	8.9423
.1	8.43	.1	8.69	.1	8.95
.2	8.44	.2	8.70	.2	8.96
.3	8.44	.3	8.70	.3	8.96
.4	8.45	.4	8.71	.4	8.97
.5	8.46	.5	8.72	.5	8.97
.6	8.46	.6	8.72	.6	8.98
.7	8.47	.7	8.73	.7	8.99
.8	8.48	.8	8.73	.8	8.99
.9	8.48	.9	8.74	.9	9.00
131.0	8.4887	135.0	8.7479	139.0	9.0071
.1	8.50	.1	8.75	.1	9.01
.2	8.50	.2	8.76	.2	9.02
.3	8.51	.3	8.77	.3	9.03
.4	8.51	.4	8.77	.4	9.03
.5	8.52	.5	8.78	.5	9.04
.6	8.53	.6	8.79	.6	9.05
.7	8.53	.7	8.79	.7	9.05
.8	8.54	.8	8.80	.8	9.06
.9	8.55	.9	8.81	.9	9.07
132.0	8.5535	136.0	8.8127	140.0	9.0719
.1	8.56	.1	8.82	.1	9.08
.2	8.57	.2	8.83	.2	9.08
.3	8.57	.3	8.83	.3	9.09
.4	8.58	.4	8.84	.4	9.10
.5	8.59	.5	8.85	.5	9.10
.6	8.59	.6	8.85	.6	9.11
.7	8.60	.7	8.86	.7	9.12
.8	8.61	.8	8.86	.8	9.12
.9	8.61	.9	8.87	.9	9.13

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
141.0	9.1367	145.0	9.3958	149.0	9.6550
.1	9.14	.1	9.40	.1	9.66
.2	9.15	.2	9.41	.2	9.67
.3	9.16	.3	9.42	.3	9.67
.4	9.16	.4	9.42	.4	9.68
.5	9.17	.5	9.43	.5	9.69
.6	9.18	.6	9.43	.6	9.69
.7	9.18	.7	9.44	.7	9.70
.8	9.19	.8	9.45	.8	9.71
.9	9.19	.9	9.45	.9	9.71
142.0	9.2015	146.0	9.4606	150.0	9.7198
.1	9.21	.1	9.47	.1	9.73
.2	9.21	.2	9.47	.2	9.73
.3	9.22	.3	9.48	.3	9.74
.4	9.23	.4	9.49	.4	9.75
.5	9.23	.5	9.49	.5	9.75
.6	9.24	.6	9.50	.6	9.76
.7	9.25	.7	9.51	.7	9.77
.8	9.25	.8	9.51	.8	9.77
.9	9.26	.9	9.52	.9	9.78
143.0	9.2662	147.0	9.5254	151.0	9.7846
.1	9.27	.1	9.53	.1	9.79
.2	9.28	.2	9.54	.2	9.80
.3	9.29	.3	9.54	.3	9.80
.4	9.29	.4	9.55	.4	9.81
.5	9.30	.5	9.56	.5	9.82
.6	9.31	.6	9.56	.6	9.82
.7	9.31	.7	9.57	.7	9.83
.8	9.32	.8	9.58	.8	9.84
.9	9.32	.9	9.58	.9	9.84
144.0	9.3310	148.0	9.5902	152.0	9.8494
.1	9.34	.1	9.60	.1	9.86
.2	9.34	.2	9.60	.2	9.86
.3	9.35	.3	9.61	.3	9.87
.4	9.36	.4	9.62	.4	9.88
.5	9.36	.5	9.62	.5	9.88
.6	9.37	.6	9.63	.6	9.89
.7	9.38	.7	9.64	.7	9.89
.8	9.38	.8	9.64	.8	9.90
.9	9.39	.9	9.65	.9	9.91

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
153.0	9.9142	157.0	10.1734	161.0	10.4326
.1	9.92	.1	10.18	.1	10.44
.2	9.93	.2	10.19	.2	10.45
.3	9.93	.3	10.19	.3	10.45
.4	9.94	.4	10.20	.4	10.46
.5	9.95	.5	10.21	.5	10.47
.6	9.95	.6	10.21	.6	10.47
.7	9.96	.7	10.22	.7	10.48
.8	9.97	.8	10.23	.8	10.48
.9	9.97	.9	10.23	.9	10.49
154.0	9.9790	158.0	10.2382	162.0	10.4974
.1	9.99	.1	10.24	.1	10.50
.2	9.99	.2	10.25	.2	10.51
.3	10.00	.3	10.26	.3	10.52
.4	10.00	.4	10.26	.4	10.52
.5	10.01	.5	10.27	.5	10.53
.6	10.02	.6	10.28	.6	10.54
.7	10.02	.7	10.28	.7	10.54
.8	10.03	.8	10.29	.8	10.55
.9	10.04	.9	10.30	.9	10.56
155.0	10.0438	159.0	10.3030	163.0	10.5622
.1	10.05	.1	10.31	.1	10.57
.2	10.06	.2	10.32	.2	10.58
.3	10.06	.3	10.32	.3	10.58
.4	10.07	.4	10.33	.4	10.59
.5	10.08	.5	10.34	.5	10.59
.6	10.08	.6	10.34	.6	10.60
.7	10.09	.7	10.35	.7	10.61
.8	10.10	.8	10.35	.8	10.61
.9	10.10	.9	10.36	.9	10.62
156.0	10.1086	160.0	10.3678	164.0	10.6270
.1	10.12	.1	10.37	.1	10.63
.2	10.12	.2	10.38	.2	10.64
.3	10.13	.3	10.39	.3	10.65
.4	10.13	.4	10.39	.4	10.65
.5	10.14	.5	10.40	.5	10.66
.6	10.15	.6	10.41	.6	10.67
.7	10.15	.7	10.41	.7	10.67
.8	10.16	.8	10.42	.8	10.68
.9	10.17	.9	10.43	.9	10.69

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
165.0	10.6918	169.0	10.9510	173.0	11.2102
.1	10.70	.1	10.96	.1	11.22
.2	10.70	.2	10.96	.2	11.22
.3	10.71	.3	10.97	.3	11.23
.4	10.72	.4	10.98	.4	11.24
.5	10.72	.5	10.98	.5	11.24
.6	10.73	.6	10.99	.6	11.25
.7	10.74	.7	11.00	.7	11.26
.8	10.74	.8	11.00	.8	11.26
.9	10.75	.9	11.01	.9	11.27
166.0	10.7566	170.0	11.0158	174.0	11.2750
.1	10.76	.1	11.02	.1	11.28
.2	10.77	.2	11.03	.2	11.29
.3	10.78	.3	11.04	.3	11.29
.4	10.78	.4	11.04	.4	11.30
.5	10.79	.5	11.05	.5	11.31
.6	10.80	.6	11.05	.6	11.31
.7	10.80	.7	11.06	.7	11.32
.8	10.81	.8	11.07	.8	11.33
.9	10.81	.9	11.07	.9	11.33
167.0	10.8214	171.0	11.0806	175.0	11.3398
.1	10.83	.1	11.09	.1	11.35
.2	10.83	.2	11.09	.2	11.35
.3	10.84	.3	11.10	.3	11.36
.4	10.85	.4	11.11	.4	11.37
.5	10.85	.5	11.11	.5	11.37
.6	10.86	.6	11.12	.6	11.38
.7	10.87	.7	11.13	.7	11.39
.8	10.87	.8	11.13	.8	11.39
.9	10.88	.9	11.14	.9	11.40
168.0	10.8862	172.0	11.1454	176.0	11.4046
.1	10.89	.1	11.15	.1	11.41
.2	10.90	.2	11.16	.2	11.42
.3	10.91	.3	11.16	.3	11.42
.4	10.91	.4	11.17	.4	11.43
.5	10.92	.5	11.18	.5	11.44
.6	10.93	.6	11.18	.6	11.44
.7	10.93	.7	11.19	.7	11.45
.8	10.94	.8	11.20	.8	11.46
.9	10.94	.9	11.20	.9	11.46

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
177.0	11.4694	181.0	11.7286	185.0	11.9878
.1	11.48	.1	11.74	.1	11.99
.2	11.48	.2	11.74	.2	12.00
.3	11.49	.3	11.75	.3	12.01
.4	11.50	.4	11.75	.4	12.01
.5	11.50	.5	11.76	.5	12.02
.6	11.51	.6	11.77	.6	12.03
.7	11.51	.7	11.77	.7	12.03
.8	11.52	.8	11.78	.8	12.04
.9	11.53	.9	11.79	.9	12.05
178.0	11.5342	182.0	11.7934	186.0	12.0526
.1	11.54	.1	11.80	.1	12.06
.2	11.55	.2	11.81	.2	12.07
.3	11.55	.3	11.81	.3	12.07
.4	11.56	.4	11.82	.4	12.08
.5	11.57	.5	11.83	.5	12.09
.6	11.57	.6	11.83	.6	12.09
.7	11.58	.7	11.84	.7	12.10
.8	11.59	.8	11.85	.8	12.10
.9	11.59	.9	11.85	.9	12.11
179.0	11.5990	183.0	11.8582	187.0	12.1174
.1	11.61	.1	11.86	.1	12.12
.2	11.61	.2	11.87	.2	12.13
.3	11.62	.3	11.88	.3	12.14
.4	11.62	.4	11.88	.4	12.14
.5	11.63	.5	11.89	.5	12.15
.6	11.64	.6	11.90	.6	12.16
.7	11.64	.7	11.90	.7	12.16
.8	11.65	.8	11.91	.8	12.17
.9	11.66	.9	11.92	.9	12.18
180.0	11.6638	184.0	11.9230	188.0	12.1822
.1	11.67	.1	11.93	.1	12.19
.2	11.68	.2	11.94	.2	12.20
.3	11.68	.3	11.94	.3	12.20
.4	11.69	.4	11.95	.4	12.21
.5	11.70	.5	11.96	.5	12.21
.6	11.70	.6	11.96	.6	12.22
.7	11.71	.7	11.97	.7	12.23
.8	11.72	.8	11.97	.8	12.23
.9	11.72	.9	11.98	.9	12.24

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
189.0	12.2470	193.0	12.5062	197.0	12.7654
.1	12.25	.1	12.51	.1	12.77
.2	12.26	.2	12.52	.2	12.78
.3	12.27	.3	12.53	.3	12.78
.4	12.27	.4	12.53	.4	12.79
.5	12.28	.5	12.54	.5	12.80
.6	12.29	.6	12.55	.6	12.80
.7	12.29	.7	12.55	.7	12.81
.8	12.30	.8	12.56	.8	12.82
.9	12.31	.9	12.56	.9	12.82
190.0	12.3118	194.0	12.5710	198.0	12.8302
.1	12.32	.1	12.58	.1	12.84
.2	12.32	.2	12.58	.2	12.84
.3	12.33	.3	12.59	.3	12.85
.4	12.34	.4	12.60	.4	12.86
.5	12.34	.5	12.60	.5	12.86
.6	12.35	.6	12.61	.6	12.87
.7	12.36	.7	12.62	.7	12.88
.8	12.36	.8	12.62	.8	12.88
.9	12.37	.9	12.63	.9	12.89
191.0	12.3766	195.0	12.6358	199.0	12.8950
.1	12.38	.1	12.64	.1	12.90
.2	12.39	.2	12.65	.2	12.91
.3	12.40	.3	12.66	.3	12.91
.4	12.40	.4	12.66	.4	12.92
.5	12.41	.5	12.67	.5	12.93
.6	12.42	.6	12.67	.6	12.93
.7	12.42	.7	12.68	.7	12.94
.8	12.43	.8	12.69	.8	12.95
.9	12.43	.9	12.69	.9	12.95
192.0	12.4414	196.0	12.7006	200.0	12.9598
.1	12.45	.1	12.71	.1	12.97
.2	12.45	.2	12.71	.2	12.97
.3	12.46	.3	12.72	.3	12.98
.4	12.47	.4	12.73	.4	12.99
.5	12.47	.5	12.73	.5	12.99
.6	12.48	.6	12.74	.6	13.00
.7	12.49	.7	12.75	.7	13.01
.8	12.49	.8	12.75	.8	13.01
.9	12.50	.9	12.76	.9	13.02

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
201.0	13.0246	205.0	13.2838	209.0	13.5430
.1	13.03	.1	13.29	.1	13.55
.2	13.04	.2	13.30	.2	13.56
.3	13.04	.3	13.30	.3	13.56
.4	13.05	.4	13.31	.4	13.57
.5	13.06	.5	13.32	.5	13.58
.6	13.06	.6	13.32	.6	13.58
.7	13.07	.7	13.33	.7	13.59
.8	13.08	.8	13.34	.8	13.59
.9	13.08	.9	13.34	.9	13.60
202.0	13.0894	206.0	13.3486	210.0	13.6078
.1	13.10	.1	13.36	.1	13.61
.2	13.10	.2	13.36	.2	13.62
.3	13.11	.3	13.37	.3	13.63
.4	13.12	.4	13.37	.4	13.63
.5	13.12	.5	13.38	.5	13.64
.6	13.13	.6	13.39	.6	13.65
.7	13.13	.7	13.39	.7	13.65
.8	13.14	.8	13.40	.8	13.66
.9	13.15	.9	13.41	.9	13.67
203.0	13.1542	207.0	13.4134	211.0	13.6726
.1	13.16	.1	13.42	.1	13.68
.2	13.17	.2	13.43	.2	13.69
.3	13.17	.3	13.43	.3	13.69
.4	13.18	.4	13.44	.4	13.70
.5	13.19	.5	13.45	.5	13.70
.6	13.19	.6	13.45	.6	13.71
.7	13.20	.7	13.46	.7	13.72
.8	13.21	.8	13.47	.8	13.72
.9	13.21	.9	13.47	.9	13.73
204.0	13.2190	208.0	13.4782	212.0	13.7374
.1	13.23	.1	13.48	.1	13.74
.2	13.23	.2	13.49	.2	13.75
.3	13.24	.3	13.50	.3	13.76
.4	13.24	.4	13.50	.4	13.76
.5	13.25	.5	13.51	.5	13.77
.6	13.26	.6	13.52	.6	13.78
.7	13.26	.7	13.52	.7	13.78
.8	13.27	.8	13.53	.8	13.79
.9	13.28	.9	13.54	.9	13.80

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
213·0	13·8022	217·0	14·0614	221·0	14·3206
·1	13·81	·1	14·07	·1	14·33
·2	13·82	·2	14·07	·2	14·33
·3	13·82	·3	14·08	·3	14·34
·4	13·83	·4	14·09	·4	14·35
·5	13·83	·5	14·09	·5	14·35
·6	13·84	·6	14·10	·6	14·36
·7	13·85	·7	14·11	·7	14·37
·8	13·85	·8	14·11	·8	14·37
·9	13·86	·9	14·12	·9	14·38
214·0	13·8670	218·0	14·1262	222·0	14·3854
·1	13·87	·1	14·13	·1	14·39
·2	13·88	·2	14·14	·2	14·40
·3	13·89	·3	14·15	·3	14·40
·4	13·89	·4	14·15	·4	14·41
·5	13·90	·5	14·16	·5	14·42
·6	13·91	·6	14·17	·6	14·42
·7	13·91	·7	14·17	·7	14·43
·8	13·92	·8	14·18	·8	14·44
·9	13·93	·9	14·18	·9	14·44
215·0	13·9318	219·0	14·1910	223·0	14·4502
·1	13·94	·1	14·20	·1	14·46
·2	13·94	·2	14·20	·2	14·46
·3	13·95	·3	14·21	·3	14·47
·4	13·96	·4	14·22	·4	14·48
·5	13·96	·5	14·22	·5	14·48
·6	13·97	·6	14·23	·6	14·49
·7	13·98	·7	14·24	·7	14·50
·8	13·98	·8	14·24	·8	14·50
·9	13·99	·9	14·25	·9	14·51
216·0	13·9966	220·0	14·2558	224·0	14·5150
·1	14·00	·1	14·26	·1	14·52
·2	14·01	·2	14·27	·2	14·53
·3	14·02	·3	14·28	·3	14·53
·4	14·02	·4	14·28	·4	14·54
·5	14·03	·5	14·29	·5	14·55
·6	14·04	·6	14·29	·6	14·55
·7	14·04	·7	14·30	·7	14·56
·8	14·05	·8	14·31	·8	14·57
·9	14·05	·9	14·31	·9	14·57

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
225.0	14.5798	229.0	14.8390	233.0	15.0982
.1	14.59	.1	14.85	.1	15.10
.2	14.59	.2	14.85	.2	15.11
.3	14.60	.3	14.86	.3	15.12
.4	14.61	.4	14.86	.4	15.12
.5	14.61	.5	14.87	.5	15.13
.6	14.62	.6	14.88	.6	15.14
.7	14.63	.7	14.88	.7	15.14
.8	14.63	.8	14.89	.8	15.15
.9	14.64	.9	14.90	.9	15.16
226.0	14.6446	230.0	14.9038	234.0	15.1630
.1	14.65	.1	14.91	.1	15.17
.2	14.66	.2	14.92	.2	15.18
.3	14.66	.3	14.92	.3	15.18
.4	14.67	.4	14.93	.4	15.19
.5	14.68	.5	14.94	.5	15.20
.6	14.68	.6	14.94	.6	15.20
.7	14.69	.7	14.95	.7	15.21
.8	14.70	.8	14.96	.8	15.21
.9	14.70	.9	14.96	.9	15.22
227.0	14.7094	231.0	14.9686	235.0	15.2278
.1	14.72	.1	14.98	.1	15.23
.2	14.72	.2	14.98	.2	15.24
.3	14.73	.3	14.99	.3	15.25
.4	14.74	.4	14.99	.4	15.25
.5	14.74	.5	15.00	.5	15.26
.6	14.75	.6	15.01	.6	15.27
.7	14.75	.7	15.01	.7	15.27
.8	14.76	.8	15.02	.8	15.28
.9	14.77	.9	15.03	.9	15.29
228.0	14.7742	232.0	15.0334	236.0	15.2926
.1	14.78	.1	15.04	.1	15.30
.2	14.79	.2	15.05	.2	15.31
.3	14.79	.3	15.05	.3	15.31
.4	14.80	.4	15.06	.4	15.32
.5	14.81	.5	15.07	.5	15.32
.6	14.81	.6	15.07	.6	15.33
.7	14.82	.7	15.08	.7	15.34
.8	14.83	.8	15.09	.8	15.34
.9	14.83	.9	15.09	.9	15.35

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
237.0	15.3574	241.0	15.6165	245.0	15.8757
.1	15.36	.1	15.62	.1	15.88
.2	15.37	.2	15.63	.2	15.89
.3	15.38	.3	15.64	.3	15.90
.4	15.38	.4	15.64	.4	15.90
.5	15.39	.5	15.65	.5	15.91
.6	15.40	.6	15.66	.6	15.91
.7	15.40	.7	15.66	.7	15.92
.8	15.41	.8	15.67	.8	15.93
.9	15.42	.9	15.67	.9	15.93
238.0	15.4222	242.0	15.6813	246.0	15.9405
.1	15.43	.1	15.69	.1	15.95
.2	15.44	.2	15.69	.2	15.95
.3	15.44	.3	15.70	.3	15.96
.4	15.45	.4	15.71	.4	15.97
.5	15.45	.5	15.71	.5	15.97
.6	15.46	.6	15.72	.6	15.98
.7	15.47	.7	15.73	.7	15.99
.8	15.47	.8	15.73	.8	15.99
.9	15.48	.9	15.74	.9	16.00
239.0	15.4869	243.0	15.7461	247.0	16.0053
.1	15.49	.1	15.75	.1	16.01
.2	15.50	.2	15.76	.2	16.02
.3	15.51	.3	15.77	.3	16.02
.4	15.51	.4	15.77	.4	16.03
.5	15.52	.5	15.78	.5	16.04
.6	15.53	.6	15.79	.6	16.04
.7	15.53	.7	15.79	.7	16.05
.8	15.54	.8	15.80	.8	16.06
.9	15.55	.9	15.80	.9	16.06
240.0	15.5517	244.0	15.8109	248.0	16.0701
.1	15.56	.1	15.82	.1	16.08
.2	15.56	.2	15.82	.2	16.08
.3	15.57	.3	15.83	.3	16.09
.4	15.58	.4	15.84	.4	16.10
.5	15.58	.5	15.84	.5	16.10
.6	15.59	.6	15.85	.6	16.11
.7	15.60	.7	15.86	.7	16.12
.8	15.60	.8	15.86	.8	16.12
.9	15.61	.9	15.87	.9	16.13

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
249.0	16.1349	253.0	16.3941	257.0	16.6533
.1	16.14	.1	16.40	.1	16.66
.2	16.15	.2	16.41	.2	16.67
.3	16.15	.3	16.41	.3	16.67
.4	16.16	.4	16.42	.4	16.68
.5	16.17	.5	16.43	.5	16.69
.6	16.17	.6	16.43	.6	16.69
.7	16.18	.7	16.44	.7	16.70
.8	16.19	.8	16.45	.8	16.71
.9	16.19	.9	16.45	.9	16.71
250.0	16.1997	254.0	16.4589	258.0	16.7181
.1	16.21	.1	16.47	.1	16.72
.2	16.21	.2	16.47	.2	16.73
.3	16.22	.3	16.48	.3	16.74
.4	16.23	.4	16.48	.4	16.74
.5	16.23	.5	16.49	.5	16.75
.6	16.24	.6	16.50	.6	16.76
.7	16.25	.7	16.50	.7	16.76
.8	16.25	.8	16.51	.8	16.77
.9	16.26	.9	16.52	.9	16.78
251.0	16.2645	255.0	16.5237	259.0	16.7829
.1	16.27	.1	16.53	.1	16.79
.2	16.28	.2	16.54	.2	16.80
.3	16.28	.3	16.54	.3	16.80
.4	16.29	.4	16.55	.4	16.81
.5	16.30	.5	16.56	.5	16.82
.6	16.30	.6	16.56	.6	16.82
.7	16.31	.7	16.57	.7	16.83
.8	16.32	.8	16.58	.8	16.83
.9	16.32	.9	16.58	.9	16.84
252.0	16.3293	256.0	16.5885	260.0	16.8477
.1	16.34	.1	16.60	.1	16.85
.2	16.34	.2	16.60	.2	16.86
.3	16.35	.3	16.61	.3	16.87
.4	16.36	.4	16.61	.4	16.87
.5	16.36	.5	16.62	.5	16.88
.6	16.37	.6	16.63	.6	16.89
.7	16.37	.7	16.63	.7	16.89
.8	16.38	.8	16.64	.8	16.90
.9	16.39	.9	16.65	.9	16.91

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
261·0	16·9125	265·0	17·1717	269·0	17·4309
·1	16·92	·1	17·18	·1	17·44
·2	16·93	·2	17·18	·2	17·44
·3	16·93	·3	17·19	·3	17·45
·4	16·94	·4	17·20	·4	17·46
·5	16·94	·5	17·20	·5	17·46
·6	16·95	·6	17·21	·6	17·47
·7	16·96	·7	17·22	·7	17·48
·8	16·96	·8	17·22	·8	17·48
·9	16·97	·9	17·23	·9	17·49
262·0	16·9773	266·0	17·2365	270·0	17·4957
·1	16·98	·1	17·24	·1	17·50
·2	16·99	·2	17·25	·2	17·51
·3	17·00	·3	17·26	·3	17·52
·4	17·00	·4	17·26	·4	17·52
·5	17·01	·5	17·27	·5	17·53
·6	17·02	·6	17·28	·6	17·53
·7	16·02	·7	17·28	·7	17·54
·8	17·03	·8	17·29	·8	17·55
·9	17·04	·9	17·29	·9	17·55
263·0	17·0421	267·0	17·3013	271·0	17·5605
·1	17·05	·1	17·31	·1	17·57
·2	17·06	·2	17·31	·2	17·57
·3	17·06	·3	17·32	·3	17·58
·4	17·07	·4	17·33	·4	17·59
·5	17·07	·5	17·33	·5	17·59
·6	17·08	·6	17·34	·6	17·60
·7	17·09	·7	17·35	·7	17·61
·8	17·09	·8	17·35	·8	17·61
·9	17·10	·9	17·36	·9	17·62
264·0	17·1069	268·0	17·3661	272·0	17·6253
·1	17·11	·1	17·37	·1	17·63
·2	17·12	·2	17·38	·2	17·64
·3	17·13	·3	17·39	·3	17·64
·4	17·13	·4	17·39	·4	17·65
·5	17·14	·5	17·40	·5	17·66
·6	17·15	·6	17·41	·6	17·66
·7	17·15	·7	17·41	·7	17·67
·8	17·16	·8	17·42	·8	17·68
·9	17·17	·9	17·42	·9	17·68

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
273-0	17.6901	277-0	17.9493	281-0	18.2085
.1	17.70	.1	17.96	.1	18.21
.2	17.70	.2	17.96	.2	18.22
.3	17.71	.3	17.97	.3	18.23
.4	17.72	.4	17.98	.4	18.23
.5	17.72	.5	17.98	.5	18.24
.6	17.73	.6	17.99	.6	18.25
.7	17.74	.7	17.99	.7	18.25
.8	17.74	.8	18.00	.8	18.26
.9	17.75	.9	18.01	.9	18.27
274-0	17.7549	278-0	18.0141	282-0	18.2733
.1	17.76	.1	18.02	.1	18.28
.2	17.77	.2	18.03	.2	18.29
.3	17.77	.3	18.03	.3	18.29
.4	17.78	.4	18.04	.4	18.30
.5	17.79	.5	18.05	.5	18.31
.6	17.79	.6	18.05	.6	18.31
.7	17.80	.7	18.06	.7	18.32
.8	17.81	.8	18.07	.8	18.33
.9	17.81	.9	18.07	.9	18.33
275-0	17.8197	279-0	18.0789	283-0	18.3381
.1	17.83	.1	18.09	.1	18.34
.2	17.83	.2	18.09	.2	18.35
.3	17.84	.3	18.10	.3	18.36
.4	17.85	.4	18.10	.4	18.36
.5	17.85	.5	18.11	.5	18.37
.6	17.86	.6	18.12	.6	18.38
.7	17.87	.7	18.12	.7	18.38
.8	17.87	.8	18.13	.8	18.39
.9	17.88	.9	18.14	.9	18.40
276-0	17.8845	280-0	18.1437	284-0	18.4029
.1	17.89	.1	18.15	.1	18.41
.2	17.90	.2	18.16	.2	18.42
.3	17.90	.3	18.16	.3	18.42
.4	17.91	.4	18.17	.4	18.43
.5	17.92	.5	18.18	.5	18.44
.6	17.92	.6	18.18	.6	18.44
.7	17.93	.7	18.19	.7	18.45
.8	17.94	.8	18.20	.8	18.45
.9	17.94	.9	18.20	.9	18.46

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
285.0	18.4677	289.0	18.7269	293.0	18.9861
.1	18.47	.1	18.73	.1	18.99
.2	18.48	.2	18.74	.2	19.00
.3	18.49	.3	18.75	.3	19.01
.4	18.49	.4	18.75	.4	19.01
.5	18.50	.5	18.76	.5	19.02
.6	18.51	.6	18.77	.6	19.02
.7	18.51	.7	18.77	.7	19.03
.8	18.52	.8	18.78	.8	19.04
.9	18.53	.9	18.79	.9	19.04
286.0	18.5325	290.0	18.7917	294.0	19.0509
.1	18.54	.1	18.80	.1	19.06
.2	18.55	.2	18.80	.2	19.06
.3	18.55	.3	18.81	.3	19.07
.4	18.56	.4	18.82	.4	19.08
.5	18.56	.5	18.82	.5	19.08
.6	18.57	.6	18.83	.6	19.09
.7	18.58	.7	18.84	.7	19.10
.8	18.58	.8	18.84	.8	19.10
.9	18.59	.9	18.85	.9	19.11
287.0	18.5973	291.0	18.8565	295.0	19.1157
.1	18.60	.1	18.86	.1	19.12
.2	18.61	.2	18.87	.2	19.13
.3	18.62	.3	18.88	.3	19.14
.4	18.62	.4	18.88	.4	19.14
.5	18.63	.5	18.89	.5	19.15
.6	18.64	.6	18.90	.6	19.15
.7	18.64	.7	18.90	.7	19.16
.8	18.65	.8	18.91	.8	19.17
.9	18.66	.9	18.91	.9	19.17
288.0	18.6621	292.0	18.9213	296.0	19.1805
.1	18.67	.1	18.93	.1	19.19
.2	18.68	.2	18.93	.2	19.19
.3	18.68	.3	18.94	.3	19.20
.4	18.69	.4	18.95	.4	19.21
.5	18.69	.5	18.95	.5	19.21
.6	18.70	.6	18.96	.6	19.22
.7	18.71	.7	18.97	.7	19.23
.8	18.71	.8	18.97	.8	19.23
.9	18.72	.9	18.98	.9	19.24

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
297.0	19.2453	301.0	19.5045	305.0	19.7637
.1	19.25	.1	19.51	.1	19.77
.2	19.26	.2	19.52	.2	19.78
.3	19.26	.3	19.52	.3	19.78
.4	19.27	.4	19.53	.4	19.79
.5	19.28	.5	19.54	.5	19.80
.6	19.28	.6	19.54	.6	19.80
.7	19.29	.7	19.55	.7	19.81
.8	19.30	.8	19.56	.8	19.82
.9	19.30	.9	19.56	.9	19.82
298.0	19.3101	302.0	19.5693	306.0	19.8285
.1	19.32	.1	19.58	.1	19.83
.2	19.32	.2	19.58	.2	19.84
.3	19.33	.3	19.59	.3	19.85
.4	19.34	.4	19.60	.4	19.85
.5	19.34	.5	19.60	.5	19.86
.6	19.35	.6	19.61	.6	19.87
.7	19.36	.7	19.61	.7	19.87
.8	19.36	.8	19.62	.8	19.88
.9	19.37	.9	19.63	.9	19.89
299.0	19.3749	303.0	19.6341	307.0	19.8933
.1	19.38	.1	19.64	.1	19.90
.2	19.39	.2	19.65	.2	19.91
.3	19.39	.3	19.65	.3	19.91
.4	19.40	.4	19.66	.4	19.92
.5	19.41	.5	19.67	.5	19.93
.6	19.41	.6	19.67	.6	19.93
.7	19.42	.7	19.68	.7	19.94
.8	19.43	.8	19.69	.8	19.95
.9	19.43	.9	19.69	.9	19.95
300.0	19.4397	304.0	19.6989	308.0	19.9581
.1	19.45	.1	19.71	.1	19.96
.2	19.45	.2	19.71	.2	19.97
.3	19.46	.3	19.72	.3	19.98
.4	19.47	.4	19.72	.4	19.98
.5	19.47	.5	19.73	.5	19.99
.6	19.48	.6	19.74	.6	20.00
.7	19.49	.7	19.74	.7	20.00
.8	19.49	.8	19.75	.8	20.01
.9	19.50	.9	19.76	.9	20.02

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
309.0	20.0229	313.0	20.2821	317.0	20.5413
.1	20.03	.1	20.29	.1	20.55
.2	20.04	.2	20.30	.2	20.55
.3	20.04	.3	20.30	.3	20.56
.4	20.05	.4	20.31	.4	20.57
.5	20.06	.5	20.31	.5	20.57
.6	20.06	.6	20.32	.6	20.58
.7	20.07	.7	20.33	.7	20.59
.8	20.07	.8	20.33	.8	20.59
.9	20.08	.9	20.34	.9	20.60
310.0	20.0877	314.0	20.3469	318.0	20.6061
.1	20.09	.1	20.35	.1	20.61
.2	20.10	.2	20.36	.2	20.62
.3	20.11	.3	20.37	.3	20.63
.4	20.11	.4	20.37	.4	20.63
.5	20.12	.5	20.38	.5	20.64
.6	20.13	.6	20.39	.6	20.64
.7	20.13	.7	20.39	.7	20.65
.8	20.14	.8	20.40	.8	20.66
.9	20.15	.9	20.41	.9	20.66
311.0	20.1525	315.0	20.4117	319.0	20.6709
.1	20.16	.1	20.42	.1	20.68
.2	20.17	.2	20.42	.2	20.68
.3	20.17	.3	20.43	.3	20.69
.4	20.18	.4	20.44	.4	20.70
.5	20.18	.5	20.44	.5	20.70
.6	20.19	.6	20.45	.6	20.71
.7	20.20	.7	20.46	.7	20.72
.8	20.20	.8	20.46	.8	20.72
.9	20.21	.9	20.47	.9	20.73
312.0	20.2173	316.0	20.4765	320.0	20.7357
.1	20.22	.1	20.48	.1	20.74
.2	20.23	.2	20.49	.2	20.75
.3	20.24	.3	20.50	.3	20.76
.4	20.24	.4	20.50	.4	20.76
.5	20.25	.5	20.51	.5	20.77
.6	20.26	.6	20.52	.6	20.77
.7	20.26	.7	20.52	.7	20.78
.8	20.27	.8	20.53	.8	20.79
.9	20.28	.9	20.53	.9	20.79

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
321-0	20.8005	325-0	21.0597	329-0	21.3189
.1	20.81	.1	21.07	.1	21.33
.2	20.81	.2	21.07	.2	21.33
.3	20.82	.3	21.08	.3	21.34
.4	20.83	.4	21.09	.4	21.34
.5	20.83	.5	21.09	.5	21.35
.6	20.84	.6	21.10	.6	21.36
.7	20.85	.7	21.11	.7	21.36
.8	20.85	.8	21.11	.8	21.37
.9	20.86	.9	21.12	.9	21.38
322-0	20.8653	326-0	21.1245	330-0	21.3837
.1	20.87	.1	21.13	.1	21.39
.2	20.88	.2	21.14	.2	21.40
.3	20.88	.3	21.14	.3	21.40
.4	20.89	.4	21.15	.4	21.41
.5	20.90	.5	21.16	.5	21.42
.6	20.90	.6	21.16	.6	21.42
.7	20.91	.7	21.17	.7	21.43
.8	20.92	.8	21.18	.8	21.44
.9	20.92	.9	21.18	.9	21.44
323-0	20.9301	327-0	21.1893	331-0	21.4485
.1	20.94	.1	21.20	.1	21.45
.2	20.94	.2	21.20	.2	21.46
.3	20.95	.3	21.21	.3	21.47
.4	20.96	.4	21.22	.4	21.47
.5	20.96	.5	21.22	.5	21.48
.6	20.97	.6	21.23	.6	21.49
.7	20.98	.7	21.23	.7	21.49
.8	20.98	.8	21.24	.8	21.50
.9	20.99	.9	21.25	.9	21.51
324-0	20.9949	328-0	21.2541	332-0	21.5133
.1	21.00	.1	21.26	.1	21.52
.2	21.01	.2	21.27	.2	21.53
.3	21.01	.3	21.27	.3	21.53
.4	21.02	.4	21.28	.4	21.54
.5	21.03	.5	21.29	.5	21.55
.6	21.03	.6	21.29	.6	21.55
.7	21.04	.7	21.30	.7	21.56
.8	21.05	.8	21.31	.8	21.57
.9	21.05	.9	21.31	.9	21.57

<i>Grains.</i>	<i>Grammes.</i>	<i>Grains.</i>	<i>Grammes.</i>	<i>Grains.</i>	<i>Grammes.</i>
333·0	21·5781	337·0	21·8373	341·0	22·0964
·1	21·58	·1	21·84	·1	22·10
·2	21·59	·2	21·85	·2	22·11
·3	21·60	·3	21·86	·3	22·12
·4	21·60	·4	21·86	·4	22·12
·5	21·61	·5	21·87	·5	22·13
·6	21·62	·6	21·88	·6	22·14
·7	21·62	·7	21·88	·7	22·14
·8	21·63	·8	21·89	·8	22·15
·9	21·64	·9	21·90	·9	22·15
334·0	21·6429	338·0	21·9021	342·0	22·1612
·1	21·65	·1	21·91	·1	22·17
·2	21·66	·2	21·92	·2	22·17
·3	21·66	·3	21·92	·3	22·18
·4	21·67	·4	21·93	·4	22·19
·5	21·68	·5	21·93	·5	22·19
·6	21·68	·6	21·94	·6	22·20
·7	21·69	·7	21·95	·7	22·21
·8	21·69	·8	21·95	·8	22·21
·9	21·70	·9	21·96	·9	22·22
335·0	21·7077	339·0	21·9668	343·0	22·2260
·1	21·71	·1	21·97	·1	22·23
·2	21·72	·2	21·98	·2	22·24
·3	21·73	·3	21·99	·3	22·25
·4	21·73	·4	21·99	·4	22·25
·5	21·74	·5	22·00	·5	22·26
·6	21·75	·6	22·01	·6	22·26
·7	21·75	·7	22·01	·7	22·27
·8	21·76	·8	22·02	·8	22·28
·9	21·77	·9	22·03	·9	22·28
336·0	21·7725	340·0	22·0316	344·0	22·2908
·1	21·78	·1	22·04	·1	22·30
·2	21·79	·2	22·04	·2	22·30
·3	21·79	·3	22·05	·3	22·31
·4	21·80	·4	22·06	·4	22·32
·5	21·80	·5	22·06	·5	22·32
·6	21·81	·6	22·07	·6	22·33
·7	21·82	·7	22·08	·7	22·34
·8	21·82	·8	22·08	·8	22·34
·9	21·83	·9	22·09	·9	22·35

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
345.0	22.3556	349.0	22.6148	371.0	24.0404
.1	22.36	.1	22.62	372.0	24.1052
.2	22.37	.2	22.63	373.0	24.1700
.3	22.38	.3	22.63	374.0	24.2348
.4	22.38	.4	22.64	375.0	24.2996
.5	22.39	.5	22.65	376.0	24.3644
.6	22.39	.6	22.65	377.0	24.4292
.7	22.40	.7	22.66	378.0	24.4940
.8	22.41	.8	22.67	379.0	24.5588
.9	22.41	.9	22.67	380.0	24.6236
346.0	22.4204	350.0	22.6796	381.0	24.6884
.1	22.43	.1	22.69	382.0	24.7532
.2	22.43	.2	22.69	383.0	24.8180
.3	22.44	.3	22.70	384.0	24.8828
.4	22.45	.4	22.71	385.0	24.9476
.5	22.45	.5	22.71	386.0	25.0124
.6	22.46	.6	22.72	387.0	25.0772
.7	22.47	.7	22.73	388.0	25.1420
.8	22.47	.8	22.73	389.0	25.2068
.9	22.48	.9	22.74	390.0	25.2716
347.0	22.4852	351.0	22.7444	391.0	25.3364
.1	22.49	352.0	22.8092	392.0	25.4012
.2	22.50	353.0	22.8740	393.0	25.4660
.3	22.50	354.0	22.9388	394.0	25.5308
.4	22.51	355.0	23.0036	395.0	25.5956
.5	22.52	356.0	23.0684	396.0	25.6604
.6	22.52	357.0	23.1332	397.0	25.7252
.7	22.53	358.0	23.1980	398.0	25.7900
.8	22.54	359.0	23.2628	399.0	25.8548
.9	22.54	360.0	23.3276	400.0	25.9196
348.0	22.5500	361.0	23.3924	410.0	26.5676
.1	22.56	362.0	23.4572	420.0	27.2156
.2	22.56	363.0	23.5220	430.0	27.8635
.3	22.57	364.0	23.5868	440.0	28.5115
.4	22.58	365.0	23.6516	450.0	29.1595
.5	22.58	366.0	23.7164	460.0	29.8075
.6	22.59	367.0	23.7812	470.0	30.4555
.7	22.60	368.0	23.8460	480.0	31.1035
.8	22.60	369.0	23.9108	490.0	31.7515
.9	22.61	370.0	23.9756	500.0	32.3995
				1000.0	64.7990

TABLE FOR CONVERTING ENGLISH INCHES INTO  
MILLIMETRES AND THE MEASURES OF  
MIONNET'S SCALE

ENGLISH INCHES	MIONNET'S SCALE	FRENCH MILLIMETRES
4.		100
3.5		95
3.	19	90
2.5	18	85
2.	17	80
2.	16	75
2.	15	70
2.	14	65
2.	13	60
1.5	12	55
1.5	11	50
1.5	10	45
1.	9	40
1.	8	35
1.	7	30
1.	6	25
1.	5	20
1.	4	15
1.	3	10
1.	2	5
1.	1	



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